

REMARKS

Applicants appreciate the Examiner's thorough consideration provided the present application. Claims 1-37 are now present in the application. Claims 2, 3, 9-30 and 37 have been withdrawn in the previous reply. Claims 1, 31, 33 and 34 have been amended. Claims 1 and 31 are independent. Reconsideration of this application, as amended, is respectfully requested.

Information Disclosure Citation

Applicants have submitted the references supplied with the Information Disclosure Statement filed on November 20, 2003 for consideration by the Examiner. However, Applicants have not received an initialed copy of the PTO-1449 form indicating that the references have been considered by the Examiner. The Examiner is courteously requested to provide Applicants with an initialed copy of the PTO-1449 form filed therewith with the next official communication.

Claim Rejections Under 35 U.S.C. § 103

Claims 1, 4-8 and 31-36 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kiyokawa et al., U.S. Patent No. 5,172,049 in view of Tverdy et al., U.S. Patent No. 5,903,163. This rejection is respectfully traversed.

In light of the foregoing amendments to the claims, Applicants respectfully submit that this rejection has been obviated and/or rendered moot. As the Examiner will note, independent claims 1 and 31 recite a combination of elements including "a cooling unit attached to the pusher for cooling the electronic device". Independent claim 31 further recites a combination of elements including "the cooling unit contacting the electronic device" and "the cooling fin being attached to a sidewall of the pusher and being connected to the cooling unit". Applicants respectfully submit that the above combinations of elements as set forth in independent claims 1 and 31 are not disclosed nor suggested by the references relied on by the Examiner.

Kiyokawa discloses an IC test equipment including terminal holders 21, contacts 31, a socket 30, a heat cap 42 mounted on the top of the socket 30, and a heater 40 and a temperature sensor 41 mounted in the heat cap 42 (see FIG. 3; col. 3, lines 14-22). Accordingly, Kiyokawa fails to teach "a cooling unit attached to the pusher" as recited in claims 1 and 31 because the heat cap 42 (referred to as a pusher by the Examiner) is mounted on the top of the socket 30 (see col. 3, lines 18-20), rather than being attached to the terminal holders 21 (referred to as a cooling unit by the Examiner).

Kiyokawa also fails to teach "a cooling unit attached to the pusher for cooling the electronic device" as recited in claims 1 and 31. In

particular, Kiyokawa teaches that the heater 40 mounted in the heat cap 42 heats the heat cap 42, which in turn, heats the socket 30 (see col. 3, lines 57-58). Kiyokawa also teaches that by the heat cap 42, the contact housing room 30R is shielded essentially from the outside so that the IC element 10 can be held at a constant temperature with ease (see col. 5, lines 6-11). Accordingly, the heat cap 42 serves as a heat provider for heating the IC element 10 to a constant temperature, rather than a cooling unit for cooling the IC element 10 as recited in claims 1 and 31.

Kiyokawa further fails to teach “the cooling unit contacting the electronic device” and “the cooling fin being attached to a sidewall of the pusher and being connected to the cooling unit” as recited in claim 31. As shown in FIG. 3 of Kiyokawa, the heat cap 42 does not contact the IC element 10. In addition, Kiyokawa also fails to teach any cooling fin and thus cannot teach the relation between the nonexistent cooling fin and the pusher or the cooling unit.

With regard to the Examiner’s reliance on Tverdy, this reference has only been relied on for its teachings of the controller, the chamber, and the elements of the cooling unit. This reference also fails to disclose the above combinations of elements as set forth in independent claims 1 and 31. Accordingly, this reference fails to cure the deficiencies of Kiyokawa.

Accordingly, neither of the references utilized by the Examiner individually or in combination teach or suggest the limitations of independent claims 1 and 31 or their dependent claims. Therefore, Applicants respectfully submit that claims 1, 4-8 and 31-36 clearly define over the teachings of the references relied on by the Examiner.

Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 103 are respectfully requested.

CONCLUSION

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact Joe McKinney Muncy, Registration No. 32,334 at (703) 205-8000 in the Washington, D.C. area.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicants respectfully petition for a one (1) month extension of time for filing a response in connection with the present application and the required fee of \$120.00 is attached herewith.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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